

Subdividing stressors and assessing their importance

State and Federal Water Contractors Agency

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The Effects Hierarchy

- Arrange stressors according to mechanism(s) of effect (not importance) for each species of interest
- Specify stressors carefully--spatial and temporal co-occurrence, prey selectivity, life stage
- Focus on those with direct effect, then proceed down the hierarchy
- Use separate life cycle model or multivariate analysis for each species--must use quantitative analysis
- Compare results across species, including species whose abundance did not decline, looking for common effects
- Use common sense for stressors without adequate data
- Avoids misleading results
 - Single-ltd variable analysis
 - “Blender approach”--multicollinearity & differential measurement error
- Vertical & horizontal multiplicity

